

Role of Advanced Technology in Preventing Suicide in Transgenders

Sugyanta Priyadarshini, Sukanta Chandra Swain

Abstract: *The goal of this paper is to attempt understanding around suicidal ideation in transgender youth and to find out how technology prevents risk of suicidal ideation among them. A pragmatic approach is followed including face to face interview of 75 transgenders about their suicidal thoughts and how major technical advances such as cyberspace, internet, mass media, and telephonic conversation enhance resilience and reduce suicidal thoughts enduring in them. Results in this article motives that instigated suicidal ideas in Transgender youth dominantly comprised of isolation and rejection based on gender identity. Participants conquered suicidal thoughts by connecting with their loved ones for social and moral support and by socializing from private realms to discuss various sensitive and embarrassing issues which regulated their adverse behavior into self-love. 85.33% of Transgender youth out of the sample of 75 agreed to the fact that they have at least once thought of attempting suicide and 75% of the sample have given up the idea of suicide due to technology enhanced intervention by providing a social platform for discussing issues, receiving advices and support about 'coming out' despite staying at the fringes of the society. This experimented paper on studying emotions of depressed transgenders can be helpful in understanding the real life challenges in the life of transgender and innovation of up-to-date technology will be encouraged in prohibiting suicidal ideas among transgenders.*

Keywords : *Suicidal ideation, Transgender youth, Technology, Mass media, Internet, Cyberspace.*

I. INTRODUCTION

Gender diversity is intensely entrenched in India. In terms of gender, our contemporary society is restricted to male/female binary arrangement categorizing individuals as either male or female. However, the existence of Transgender (i.e., people who do not identify with the gender they were assigned at birth) section has challenged the rigid concept of this binary arrangement of social institution. Present-day attitude of Indian society towards Transgender is deceitful. From being mocked and treated differently, to facing unfair rejection at workplaces, to being subjected to violence and murder, India's transgender community have had a harrowing time for ages. Discrimination, victimization and stigmatization instigate most of the members of transgender community to attempt suicide. Lack of happiness and wellbeing enflame suicidal ideation in transgenders. Under this scenario, technology has played a significant role in

preventing suicidal ideation in transgender youth. Major technical advances such as cyberspace, internet, mass media, and telephonic conversation have enhanced resilience and reduced suicidal thoughts enduring in them. Basically, Suicide is the act of voluntarily ending one's own life most often resulting from prolonged suicidal ideation. Suicide is the third leading cause of death among 15-to-24 year olds (Anderson & Smith, 2005). Suicide ideation is considered to be an important precursor to later attempted and completed suicide (Brent, Johnson, Bartle et al., 1993; Gili-Planas, Roca-Bennasar, Ferrer-Perez et al., 2001; Lewinsohn, Rohde, & Seeley, 1996; Reinherz, Giaconia, Silverman et al., 1995) and is of major public health significance. In addition to depression, substance use disorders are regarded as major risk factors for suicidal behavior in both clinical and community populations (Bukstein, Brent, Perper et al., 1993; Dhossche, Meloukheia, & Chakravorty, 2000; Wu, Hoven, Liu et al., 2004). Other associated factors identified in the survey identified high rate of depression, anxiety as well as substance abuse can be the contributing factors for suicidal ideation among transgender (Clements-Nolle, Noelle, Guzman, et al., 2001; Mathy, 2002b; Xavier et al., 2007). However, parental rejection is considered to be the primary stressor and frequent experiences of discrimination are identified as the secondary factor resulting in suicidal ideation among transgender youth (Grossman & D'Augelli, 2008). However, research have revealed discrimination and victimization are related to psychological distress such as anxiety and depression which may in turn intensify the risk of attempting suicide (Diaz, Ayala, Bein, Henne, & Marin, 2001; Herek Gillis, Cogan, & Glunt, 1997; Herek et al., 1999; Hershberger & D'Augelli, 1995; Mays & Cochran, 2001; Waldo et al., 1998). A small internet survey comprising of 61 transgender from Canada and 12 from United States was conducted to determine the factors associated with suicidal ideation. The survey found that the transgender individuals were more likely to attempt suicide in comparison to cisgender and homosexual males due to societal oppression (Mathy, 2002). Further, it was noted that when the transgender individuals come out with true gender identity, they are subjected to higher rate of depression and anxiety disorder due to societal unacceptability leading to escalated rate of reported suicides attempts by transgender youth (Fergusson et al., 1999). A study conducted by Clinical social worker Caitlin Ryan's Family Acceptance Project (San Francisco State University) revealed the effect of rejection by family and peers on mental wellbeing of transgenders.

Revised Manuscript Received on January 5, 2020

* Correspondence Author

Sugyanta Priyadarshini*, Faculty Associate & Research Scholar, KIIT Deemed to be University, Bhubaneswar,
Email: sugyanta.priyadarshini@kiit.ac.in

Sukanta Chandra Swain, Associate Dean, KIIT Deemed to be University, Bhubaneswar,
Email: sukanta_swain@yahoo.com

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This study exposed that transgender adolescents who come across rejection from their family and peers experience more than eight times likely to have attempted suicide, more than six times likely to report high levels of depression, more than three times likely to use illegal drugs and more than three times likely to be at high risk for HIV or other STDs" by the time they reach their early 20s. Further, a study also discovered that the suicide ideation among transgender adolescents and youth is more than older age groups (Xavier et al., 2007). A ground level study conducted by National Center for Transgender Equality & the National Gay and Lesbian Task Force, 2009 comprising of 6500 transgenders showed "47% of transgenders reported adverse transgender action, 44% were denied jobs, 26% were fired, 26% were refused promotion because of their transgender status." Approximately 97% of transgenders reported that they were subjected to mistreatment or harassment on job including invasion of privacy, verbal abuse and being purposefully referred to as the wrong gender (National Center for Transgender Equality & the National Gay and Lesbian Task Force, 2009). Along with a touch of belongingness, internet has empowered socially marginalized sections especially transgenders by providing social and emotional support through interaction with fellow transgenders in web. (Finn, 1996; Finn, 1999; Shaw & Gant, 2002; Wellman, 2001). Cyberspace not just provides a platform for denounced section of the society to discuss numerous sensitive and distressing matters (Idriss, Kvedar, & Waston, 2009; White & Dorman, 2001) rather it also helps them to voice their feelings, portray their unconventional temperament and receive or offer suitable advice to peers (Hegland & Nelson, 2002, p. 141). However, the use of innovative and creative technology for preventing suicidal ideation can help to address targeted population who are at risk. But technology provides a field for suicide ideation prevention through mass media, cyberspace, internet and telephonic conversation and many others. Information and communication technology have contributed an innovative accessible platform to prevent suicidal risks by promoting well-being as well as emotional support to transgender adolescents. However, the goal of the present study is to find out the reasons behind suicidal ideation in transgender youth and to find out how technology prevents risk of suicidal ideation among them.

II. METHODOLOGY

This paper is the outcome of a qualitative research. The face-to-face in-depth interview has been conducted in a period of approximately one year. Participants chose their own pseudonyms and were compensated with 100 rupees. Selection of these 75 respondents is done from Bhubaneswar (Odisha, India) and periphery of it through snowball sampling. The respondents studied vary in their age group from 18-25 years. Data is collected during the leisure time of the respondents. The sample was recruited through community centers, youth group leaders, transgender mail lists, and snowball sampling. The case study method is also followed and five prominent cases have been presented. The given below figure 1 shows how through snowball sampling transgenders were found and communicated and data was

collected from them. Initially, potential transgender were identified from the population and were requested to recruit or nominate other transgenders if they fit the description of potential subjects concerned and finally this procedure is repeated unless sufficient data is collected.

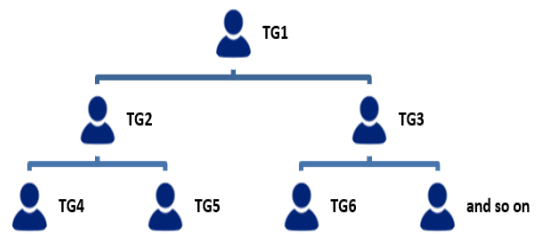


Fig. 1. Snowball sampling conducted for transgender

III. CAUSES

Transgender youth are enormously susceptible to a multitude of tribulations mostly childhood abuse, sexual assaults and psychiatric disorders. The societal stigma surrounding transgender identity characterizes them as mentally ill, socially deviant and sexually predatory which drags them down to depression. Rejected by the family, mocked by the society and abandoned by friends and relatives brings suicidal ideation in transgender youth. In comparison to adults, transgender youth face major challenges. Most of them are emotionally and financially dependent on their parents and as most of the doctors deny providing medical treatment to transgenders, their challenges become critical. A study conducted in 2007 on transgender youth revealed that in particular 18% of interviewed transgender teenagers tried to commit suicide which was strongly associated with their transgender identity (Grossman, 2007). These interviewed transgenders who attempted to commit suicide were verbally abused and physically ill-treated by their family and relatives. In comparison with those transgender youth who have never tried committing suicide have a significant difference in family and peer relation (Grossman, 2007). Strong parental support brings greater success and emotional stability in the life of transgender on the other hand a controlling and dismissive stance in parents will lead to a cascade of more serious problems (Riley Elizabeth, 2013). Reported suicide rates are even higher who are mostly exposed to physical abuse and mental harassment accompanied with financial distress owing to acute unemployment and low household income (Grant, 2016).

A. Isolation

Social isolation relates to the absence of social contact which leads to loneliness or is a state of being cut off from social networks or communities. Social isolation mostly begins early in life in case of transgenders.

Transgender individual gets preoccupied with feelings and thoughts of their gender identity that are not easy to share with other individuals from early childhood. During this vulnerable time of development, the feelings of shame, guilt, and fear of alienation due to social exclusion predispose depressive symptoms later in life. Familiar exclusion and societal denigration, bigoted relatives and pseudo friends, unreliable colleagues and unwelcoming neighborhood imbue isolation in transgenders which over years turns to a chronic condition affecting mental and physical health including heightened anxiety, depression and other aspects of personal existence. Social isolation resulting from unemployment, familiar crisis and societal adversity can become exacerbated. Out of 75 transgenders interviewed, 93.33% (70) of transgenders agreed that the feeling of isolation mostly bring about suicidal ideation. Out of 70, 65 transgenders still suffer isolation despite surrounded with transgender folks. 58 transgenders voiced that they sense the lacuna of their family who disowned them and the absence of their friends and relatives who mocked at their sexual orientation. 35 transgenders expressed that, the void created by their bigoted friends, family and relatives cannot be accomplished by anyone. 55/75 transgender went down to depression due to constant isolation.

B. Rejection

Transgender individuals are predominantly vulnerable to psychological distress due to societal rejection and violence and not due to their gender identity. Rejection in tremendous scale in every step of life provokes suicidal motives in transgender. Refusal for hiring, parental rejection while transitioning, objecting their treatment and health insurance facilities, denial for housing, refusal from accessing washrooms, school, colleges and even funerals adversely affect their sense of worth and self-perception. Out of 75 transgenders, the entire sample is subjected to rigid societal rejection out of which; 74 transgenders faced paternal rejection while transitioning, 63 were denied for dignified job despite considered as eligible but were discarded on the criterion of gender identity, 48 faced housing discrimination, 50 were refused access to health-care and health insurance, 57 were refuted from using public ladies toilet, 45 snubbed from going to school or colleges to access education, 48 faced denials from accessing funeral spots for their fellow transgenders.

IV. TECHNOLOGY TRANSFORMING LIVES OF TRANSGENDER YOUTH

Gender dichotomy is considered as an elementary system to define gender and unfortunately, transgenders break this anticipation which turns out to be a significant reason behind their unacceptability and denunciation. The socially unacceptable unappealing appearance that challenged binary system of the gender biased society has brought isolation, abandonment, condemnation, criticism and ostracization in the life of transgender. This sexual minority section is emotionally abandoned, socially prohibited, economically forbidden and physically abused which imbue suicidal thoughts in them. However, technology plays a pivotal role in increasing the geographical reach and providing care and

assistance in remote areas to underprivileged minority community 'Transgender' which reduces the risk of suicidal ideation in them to a considerable extent. The capacity to overcome the barriers to care is one of the outstanding advantages of these technological innovations and evolutions to prevent suicidal ideation. When efficient conventional assistance is unavailable, technology inform of mass media, cyberspace, internet, telephonic conversation can provide instantaneous solutions to suicidal ideation. By coming across inspirational videos delivered by transgenders, by seeking advice from peers on online platform during utter depression, by interacting with fellow transgenders regarding how to come out as transgender and overcome societal stigma, by discussing about challenges in sex reassignment surgery, by extending a sense of understanding in frustrated and demotivated transgender, by reading articles, books, magazines, newspapers about different achievements achieved by transgender despite absolute hardship which can motivate transgenders not to quit and fight for their survival. Further, with the help of social networking sites and chat rooms, the services to prevent suicidal ideas among vulnerable people can decrease to a significant extent. Moreover, suicide prevention lifeline and crisis call centre extend care through telephonic conversation which are effective in controlling suicidal ideation among transgender. Even, outreaching via e-mails and texting are considered to be fastest economical communicating channels which reaches transgender dealing with suicidal motives. Further, suicidal prevention web-based outreach such as afterdeployment.org and www.lifeline-gallery.org provide interactive and engaging environment for support which can be quite helpful. By the emergence of social applications like Facebook, Tumblr, Transdr and Grindr are using artificial intelligence to prevent suicide by providing a platform for sharing feelings and emotions which a transgender cannot express publicly.

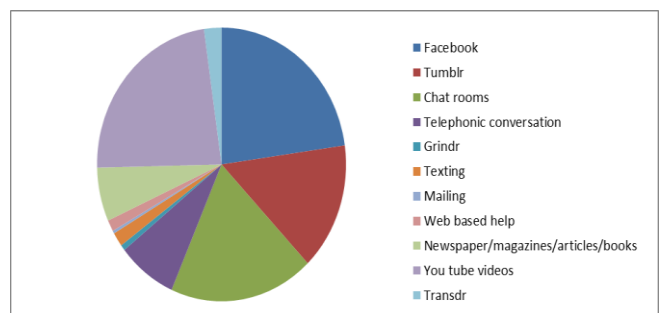


Fig. 2. Technology used by transgender in preventing suicidal ideation

From a sample of 75 transgender, 85.33% of Transgender youth agreed to the fact that they have at least once thought of attempting suicide and 75% of the sample have given up the idea of suicide due to technology enhanced intervention by providing a social platform such as Facebook, Tumblr, Transdr, Grindr, chat rooms, telephonic conversation, texting, mailing, web based help and you tube videos for discussing issues, receiving advices and support about 'coming out' despite staying at the fringes of the society.

V. EXPERIMENTS

Stated below are the experiments on certain transgenders who once or more than once thought of ending their lives as they were unable to cope up with the repulsive environment towards transgender.

A. Experiment 1

Rekha, a 19 years transgender expressed her experience how technology facilitated in gaining clarity over gender dysphoria and prevented her from committing suicide by connecting her with fellow transgenders. She stated that she was utterly unaware about the variations in her body which was weird but made her feel wonderful within. Deep inside she knew that she was different from other males of her age. Deliberate internet browsing regarding gender identity led her to a site explaining the notion of transgender. She was shocked to realize the reality regarding her gender but was willing to commit suicide out of fear of disgrace and embarrassment which she along with her family will have to face if she comes out in public. Being an elder son to a typical traditional family, coming out as a transgender brought suicidal thoughts in her. But by further surfing, she found an internet forum where she met fellow transgenders who were comfortable around non-confronting their gender identity. That instigated her not to come out offline but online where she need not hide her identity and discuss her real life experiences as a transgender through social media.

B. Experiment 2

Dismal dejection stemming from ruthless rejection brings suicidal ideation in transgender. A transgender naming Reema expressed her emotions by saying, "Life has never been easy since the day I came out as a transgender. Rejected by family, friends and relatives, denied by landlords for rental stays, rebuffed from educational institutes, deprived of job despite being eligible generated a feeling of worthlessness in me. Financial hardship made my life more miserable. Finding no way out to live a dignified life, I once decided to commit suicide out of absolute dejection. But one day I got to know about Tumblr app where I discussed my issues and few transgender supported me emotionally and helped me to find a job which encouraged me to fight for my right and prevented me to commit suicide.

C. Experiment 3

Jasmine desperately desired to change her genitals but had no clue how and where to access it. She was completely dissatisfied with her gender identity which constantly brought suicidal thoughts in her. Her sexual desires were not accomplished and she badly needed to change her sex. She was a woman inside but had to pretend like a man which drowned her into utter depression and she wanted to commit suicide because she was left with no option. But by connecting with fellow transgenders in online platform naming Tumblr, they assisted her in discovering medical facilities to convert her male to female genitals. Now, she is highly satisfied with her sex life with her female sexual organs.

D. Experiment 4

Physical exploitation and mental torment are very common in the life of transgender. Being bullied in every stage loses

pleasure of living life. Persistent feeling of sadness made me unmotivated to live my life. Right from beginning after I come out in my childhood, I was constantly bullied by my friends, taunted by my relatives and disowned by my family. Life had become more treacherous than death which brought suicidal ideas in my life. But, then I came across the inspirational videos of transgenders like Laxmi Narayan Tripathy and Gauri Sawant and realized that I can also remain happy and satisfied with my life. It changed my perception towards my gender identity and I decided not to quit' said Ravina

E. Experiment 5

I tried a lot to explain my parents what I was going through but I could not after repeated trials. I was so frustrated of my life that I preferred committing suicide instead of revealing it to my parents. But by interacting with my transgender friends on online platform, they advised me the ways to come out in front of my parents. So, one day I made my mind to reveal the truth and showed them the video of transgender and narrated them the way I feel. They were highly disappointed but I felt relieved by making them understand what I was going through. By showing the video on transgender, they realized the mental pressure I was dealing with and finally decided to access medical help' said Sheetal.

VI. RESULTS

technology plays a pivotal role in increasing the geographical reach and providing care and assistance in remote areas to underprivileged minority community 'Transgender' which reduces the risk of suicidal ideation in them to a considerable extent. Findings of entire paper is summarized below in table 1 & 2.

Table I: Types of rejection faced by transgenders

Sl.No	Transgender facing types of rejections	Frequency	%
1	paternal rejection	74	98.6
2	Job rejection	63	84
3	Rented stay rejection	48	64
4	Health care & health insurance rejection	50	66.6 6
5	Entry to public ladies toilet restriction	57	76
6	Denials from educational institutes	45	60
7	Denial from accessing funeral spots	48	64

Transgenders are subjected to numerous rejections including parental rejections, job rejections, rejections from rental stays and health care, rejections from using public washrooms, denials from educational institutes and even from getting buried in funeral spots. However, the percentage of parental rejection is highest from the sample collected followed by job rejection, restriction on entry to public toilets, rejection in providing health care facilities, denial in accessing rented stays, funeral spots and education which is mentioned in Table 1.

Table II: Isolation faced by transgenders

Sl.No	Transgender facing isolation	Frequency	%
1	Isolation due to the absence of friends and relatives	35	50
2	Isolation due to familiar discord	58	77.3
3	Isolation despite surrounded by peers	65	86.6
4	Isolation resulting in depression	55	73.3
5	Isolation bringing down suicidal ideation	70	93.3

The life of transgender degrades from bad to worse due to solitariness created in their life resulting from void created by familiar discord and isolation due to the absence of friends and relatives. This void is so intense that even if they are surrounded by peers the solitariness cannot be ignored which further leads to depression and brings suicidal ideation in them. Out of the sample collected, 50% of transgenders were facing isolation due to disassociation from friends and relatives and 77.3% were facing lonely due to familiar discord. However, 86.66% transgenders felt isolated even after surrounded by their peers. Unfortunately, this prolonged sense of isolation results in depression (73.33%) and consequently suicidal ideation (93.33%) in them. (mentioned in Table 2)

However, by the emergence of social applications like Facebook, Tumblr, Transdr and Grindr are using artificial intelligence to prevent suicide by providing a platform for sharing feelings and emotions which a transgender cannot express publicly. Further, suicide prevention lifeline and crisis call centre, outreaching via e-mails and texting, telephonic conversation, publishing articles, books, magazines, newspapers about motivating transgender are some of efficient ways undertaken to encourage transgender to fight for their life and not to give up. 75% of the sample have given up the idea of suicide due to technology enhanced intervention by providing a social platform for discussing issues, receiving advices and support about 'coming out' despite staying at the fringes of the society.

VII. DISCUSSION

Suicidal ideation is a subset of serious health issue resulting in 'Suicide'. Suicidal ideation in transgender resulting in suicide is trending upwards with the passage of time which calls for an urgent requirement for effective and innovative technical methods for prevention of suicidal ideation. Traditional approaches include texting, mailing, radio, television, telephones are proved to be effective but are outdated in this scenario. With the advancement of technology, internet, smart phones, chat rooms and social networking applications have come up with new methods for efficient suicidal behavior prevention. The goal is to promote such platforms which prevent suicidal prevention by providing support and via connecting with peers in order to overcome distress and solitariness. Social networking sites have come forward with innovative ways of connecting with

peers facing similar challenges and experiences. Even different Facebook pages such as suicide prevention with 44,000 fans have proved to be effective by building as community to resolve the issues by interactions, discussions and counseling and sharing personal stories and experiences. Software based programmes such as Virtual world and Second life should be encouraged. But, the advantages of technology in preventing suicidal ideation are accompanied with certain limitations. Limitations like fear of confidentiality and privacy may hinder many transgender to share their true feeling in social platforms. Limited access to internet is one of the obstacles to care. As internet provides a sense of anonymity so the risk of unethical and illegal issues may come up this will discourage transgender to come out in social platforms. Further, unregulated quality of resources is available in abundance in internet which is again a matter of great concern. Many services do not follow ethical guidelines and evidence based practice which should not be taken into account. However, technology plays a significant role in preventing suicidal ideation and its use will grow exponentially with time. Although technology is not a substitute of clinical help assessment but is a complementary to it. With innovation as well as evolution of new technological tools, more and more lives of transgenders can be saved.

VIII. CONCLUSION:

The life of transgender is a tussle for existence. Discrimination, victimization and stigmatization instigate most of the members of transgender community to attempt suicide. From societal abandonment to struggle for acceptability, transgenders have to come across offensive statements, physical torture, mental strain, financial shortage and abusive sex life. However, this study has identified rejection and isolation as the causes and consequences of utter depression resulting in suicidal ideation. Societal exploitation along with familiar discord elevates the risk of suicide ideation among transgender youth. Financial troubles compelling transgender into forced sex resulting in physical and substance abuse brings suicidal ideas in them. However, the use of innovative and creative technology for preventing suicidal ideation can help to address targeted population who are at risk. But technology provides a field for suicide ideation prevention through mass media, cyberspace, internet and telephonic conversation and many others. Information and communication technology have contributed an innovative accessible platform to prevent suicidal risks by promoting well-being as well as emotional support to transgender adolescents. By the emergence of social applications like Facebook, Tumblr, Transdr and Grindr are using artificial intelligence to prevent suicide by providing a platform for sharing feelings and emotions which a transgender cannot express publicly. From this research, we found that 85.33% (75 samples) of the transgender youth thought of committing/attempting suicide at least once.

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However, advancement of technology/ social platforms helped 75% of the sample to discuss issues, receiving recommendations and support to stabilize mental state and give-up the suicide thought. By staying in fringes of society, technology has reduced the distance between transgenders and made their communication process simple and helpful by providing peer-based outreach, counseling, and referrals which are succeed in preventing suicide ideas in them.

REFERENCES

1. Arria A, O'Grady K, Caldeira K, Vincent K, Wilcox H, Wish E (2009) Suicide Ideation Among College Students: A Multivariate Analysis. *Archives of Suicide Research* 13:230–246 . <https://doi.org/10.1080/13811110903044351>
2. Brent DA, Johnson B, Bartle S, Bridge J, Rather C, Matta J, Connolly J, Constantine D (1993) Personality Disorder, Tendency to Impulsive Violence, and Suicidal Behavior in Adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry* 32:69–75 . <https://doi.org/10.1097/00004583-199301000-00010>
3. Bukstein OG, Brent OA, Perper JA, Moritz G, Baugher M, Schweers J, Roth C, Balach L (1993) Risk factors for completed suicide among adolescents with a lifetime history of substance abuse: a case-control study. *Acta Psychiatrica Scandinavica* 88:403–408 . <https://doi.org/10.1111/j.1600-0447.1993.tb03481.x>
4. Clements-Nolle K, Marx R, Guzman R, Katz M (2001) HIV prevalence, risk behaviors, health care use, and mental health status of transgender persons: implications for public health intervention. *Am J Public Health* 91:915–921 <https://doi.org/10.2105/ajph.91.6.915>
5. Dhossche DM, Meloukheia AM, Chakravorty S (2000) The association of suicide attempts and comorbid depression and substance abuse in psychiatric consultation patients. *General Hospital Psychiatry* 22:281–288 . [https://doi.org/10.1016/S0163-8343\(00\)00085-2](https://doi.org/10.1016/S0163-8343(00)00085-2)
6. Fergusson DM, Boden JM, Horwood LJ (2008) Exposure to childhood sexual and physical abuse and adjustment in early adulthood. *Child Abuse & Neglect* 32:607–619 . <https://doi.org/10.1016/j.chiabu.2006.12.018>
7. Finn J (1999) An exploration of helping processes in an online self-help group focusing on issues of disability. *Health Soc Work* 24:220–231 . <https://doi.org/10.1093/hsw/24.3.220>
8. Giaconia RM, Reinherz HZ, Silverman AB, Pakiz B, Frost AK, Cohen E (1995) Traumas and Posttraumatic Stress Disorder in a Community Population of Older Adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry* 34:1369–1380 . <https://doi.org/10.1097/00004583-199510000-00023>
9. Gili-Planas M, Roca-Bennasar M, Ferrer-Perez V, Bernardo-Arroyo M (2001a) Suicidal Ideation, Psychiatric Disorder, and Medical Illness in a Community Epidemiological Study. *Suicide and Life-Threatening Behavior* 31:207–213 . <https://doi.org/10.1521/suli.31.2.207.21508>
10. Gili-Planas M, Roca-Bennasar M, Ferrer-Perez V, Bernardo-Arroyo M (2001b) Suicidal Ideation, Psychiatric Disorder, and Medical Illness in a Community Epidemiological Study. *Suicide and Life-Threatening Behavior* 31:207–213 . <https://doi.org/10.1521/suli.31.2.207.21508>
11. Grossman AH, D'Augelli AR (2007) Transgender youth and life-threatening behaviors. *Suicide Life Threat Behav* 37:527–537 . <https://doi.org/10.1521/suli.2007.37.5.527>
12. Hegland JE, Nelson NJ (2002) Cross-Dressers in Cyber-Space: Exploring the Internet as a Tool for Expressing Gendered Identity. *International Journal of Sexuality and Gender Studies* 7:139–161 . <https://doi.org/10.1023/A:1015845100237>
13. HEREK GM, GILLIS JR, COGAN JC, GLUNT EK (1997) Hate Crime Victimization Among Lesbian, Gay, and Bisexual Adults: Prevalence, Psychological Correlates, and Methodological Issues. *J Interpers Violence* 12:195–215 . <https://doi.org/10.1177/088626097012002003>
14. Hershberger SL, D'Augelli AR (1995) The impact of victimization on the mental health and suicidality of lesbian, gay, and bisexual youths. *Developmental Psychology* 31:65–74 . <https://doi.org/10.1037/0012-1649.31.1.65>
15. Idriss SZ, Kvedar JC, Watson AJ (2009) The role of online support communities: benefits of expanded social networks to patients with psoriasis. *Arch Dermatol* 145:46–51 . <https://doi.org/10.1001/archdermatol.2008.529>
16. Lewinsohn PM, Rohde P, Seeley JR (1996) Adolescent Suicidal Ideation and Attempts: Prevalence, Risk Factors, and Clinical Implications.

Clinical Psychology: Science and Practice 3:25–46 . <https://doi.org/10.1111/j.1468-2850.1996.tb00056.x>

17. Mathy RM (2003) Transgender Identity and Suicidality in a Nonclinical Sample: Sexual Orientation, Psychiatric History, and Compulsive Behaviors. *Journal of Psychology & Human Sexuality* 14:47–65 . https://doi.org/10.1300/J056v14n04_03
18. PhD ARD, PhD AHG, MS MTS (2008) Gender Atypicality and Sexual Orientation Development Among Lesbian, Gay, and Bisexual Youth. *Journal of Gay & Lesbian Mental Health* 12:121–143 . https://doi.org/10.1300/J529v12n01_08
19. PhD JF (1995) Computer-Based Self-Help Groups. *Social Work with Groups* 18:109–117 . https://doi.org/10.1300/J009v18n01_11
20. Riley EA, Sitharhan G, Clemson L, Diamond M (2013) Recognising the needs of gender-variant children and their parents. *Sex Education* 13:644–659 . <https://doi.org/10.1080/14681811.2013.796287>
21. Shaw LH, Gant LM (2002) In defense of the internet: the relationship between Internet communication and depression, loneliness, self-esteem, and perceived social support. *Cyberpsychol Behav* 5:157–171 . <https://doi.org/10.1089/109493102753770552>
22. Wellman B (2001) Physical Place and Cyberplace: The Rise of Personalized Networking. *International Journal of Urban and Regional Research* 25:227–252 . <https://doi.org/10.1111/1468-2427.00309>
23. (2011) Injustice at Every Turn: A Report of the National Transgender Discrimination Survey. In: National LGBTQ Task Force. <https://www.thetaskforce.org/injustice-every-turn-report-national-transgender-discrimination-survey/>. Accessed 10 Dec 2019
24. A Blueprint for Equality: A Federal Agenda for Transgender People. In: *LGBT Aging Center.org*. <https://www.lgbtagingcenter.org/resources/resource.cfm?r=493>. Accessed 10 Dec 2019a
25. What is social isolation? In: *No Isolation*. <https://www.noisolation.com/global/research/what-is-social-isolation/>. Accessed 10 Dec 2019b.

AUTHORS PROFILE



Sugyanta Priyadarshini, is Faculty Associate in KIIT. She graduated under Utkal University and was the topper of her batch in 2014. She was the gold medalist in her master's degree from Berhampur University. She is currently pursuing her PhD and is interested in Gender Economics.



Dr. Sukanta Chandra Swain, is a Post Graduate, M. Phil. and Ph. D. in Applied Economics, besides being a Law Graduate. He has more than 25 years of experience in teaching Post-Graduate and Doctoral Programs at different institutes and Universities of repute. Recently he is Associate Dean in KIIT school of Humanities. His research area includes Welfare Economics, Financial Economics & General Management.